

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023829**Date Inspected:** 23-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

WELDING

This QA Inspector observed the following work in progress:

BAY 14

This QA Inspector observed ABF qualified NDT personnel perform Magnetic Particle Testing on U Rib Splice Plate weld joints after back gouging. Weld joints are identified as X3305K-014-001, 002 and X3305K-013-001, 002. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 045143 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-014-001, 002. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 235~250 amperes and 25.1 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067275 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-008-001, 002. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The

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welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 230~240 amperes and 25.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067949 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Deck panel I Stiffener plate weld of OBG Segment 14W. Weld joint is identified as DP3172-001-389. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 250~260 amperes and 26.4 volts, which appears to be in compliance with the approved WPS. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 045270 perform welding by Submerged Arc Welding (SAW), on Deck panel DP3177 to Deck panel DP3183 weld of OBG Segment 14W. Weld joint is identified as SEG3020-011. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-223(2)1T-ESAB-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 045280, 066239 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel DP3168A to Deck panel DP3169A weld of OBG Segment 14W. Weld joint is identified as SEG3020-002. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-223(2)1T-ESAB-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 045246 perform welding by Shielded Metal Arc Welding (SMAW), on Anchor plate to Longitudinal diaphragm weld at panel point PP126 of OBG Segment 14W. Weld joint is identified as SEG3020U-587. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 140~150 amperes and 23.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066361 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam diaphragm plate to Deck plate weld at panel point PP127 of OBG Segment 14W. Weld joint is identified as SEG3020M-204, 205, 206. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067610 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam diaphragm plate to Edge plate weld at panel point PP127.5 of OBG Segment 14W. Weld joint is identified as SEG3020H-002, 151, 153. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 045175 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Deck panel diaphragm weld at panel point 125, of

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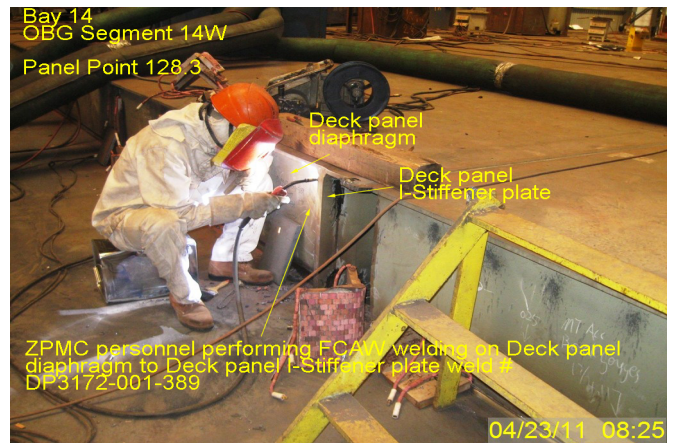
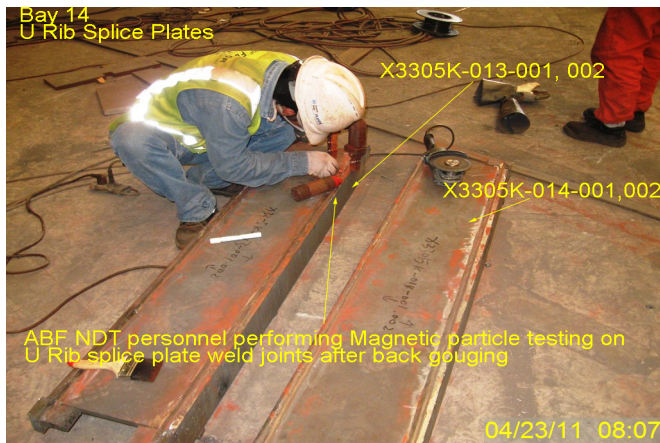
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OBG Segment 14W. Weld joint is identified as SEG3020V-028. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 245~260 amperes and 24.9 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 058245 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Deck panel diaphragm weld at panel point 125, of OBG Segment 14W. Weld joint is identified as SEG3020L-031. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 240~260 amperes and 25.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 037748 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate to Deck plate weld between panel point 127 and panel point 128, of OBG Segment 14W. Weld joint is identified as SEG3020-017. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

Inspected By: Upadhye, Anand

Quality Assurance Inspector

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Reviewed By: Clifford, William

QA Reviewer